

**Notice of Allowability**

Application No.

10/717,299

Examiner

Ardith E. Hertzog

Applicant(s)

SRINIVAS ET AL.

Art Unit

1754

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to all papers filed 12/19/2005.
2. ☒ The allowed claim(s) is/are 1-52 and 54, now numbered as 1-53, respectively.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 12/1/2005.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

  
**STANLEY S. SILVERMAN**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 1700**

## REASONS FOR ALLOWANCE

1. The following is an examiner's statement of reasons for allowance: The "Response to Final Office Action" (amendment) filed December 19, 2005 has been **entered**, as it is **agreed** that all instant claims are allowable over the prior art of record. Applicant's detailed arguments (per pp. 11-16 of the amendment), in concert with the Rule 132 Declaration of Girish Srinivas, have been carefully considered and found **persuasive**. In particular, contrary to the position set forth in the final rejection, it is **now agreed** that the combination of Srinivas et al. (US 6,099,819) and Audeh (US 4,786,483) would **not** have rendered the instantly claimed methods *prima facie* obvious.

As summarized by applicant:

The reasoning given... to support the obviousness rejection appears to be that one of ordinary skill in the art would have been motivated to apply the method and catalysts of the '819 patent to a gas stream containing both hydrogen sulfide and mercury and as a result would find out (or discover) that simultaneous removal of both hydrogen sulfide and mercury had occurred and because of acquiring this new information would have then known that a separate step of mercury removal was not necessary. This reasoning is flawed and does not support a *prima facie* case of obviousness. This reasoning requires that one of ordinary skill in the art perform experiments and discover the additional benefit and function of the process that was until that time unknown in the art. In the absence of prior knowledge of this benefit and function, it would not have been obvious to one of ordinary skill in the art that simultaneous removal of hydrogen sulfide and mercury could be achieved using the '819 patent process and that artisan would not have known before making the discovery that an additional process step for removal of mercury would not have been required.

Applicants also emphasize that one of ordinary skill in the art at the time this invention was made would not have been motivated to apply the catalytic hydrogen sulfide removal process of the '819 patent to gas streams containing both hydrogen sulfide and mercury because that artisan would be aware that mercury would likely detrimentally affect

catalyst function and/or would likely detrimentally affect process equipment. Further, the inventors' findings that no significant catalyst deactivation occurred, that mercuric sulfide co-condensed with sulfur and that the process provided for very efficient mercury removal represent significant unexpected results that support non-obviousness of the method as claimed. The declaration of Girish Srinivas, an inventor hereof, under 37 C.F.R. 1.131 [sic] is submitted herewith to provide evidence supporting these arguments. (remarks accompanying amendment at p. 13, last full paragraph – paragraph bridging pp. 13-14)

**Thus, all** prior art rejections of the claims, as maintained in the final rejection, have been **withdrawn**, with instant claims 1-52 and 54 now deemed allowable over the prior art of record.

2. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance".

### ***Conclusion***

3. Any inquiry concerning this communication should be directed to Ardith E. Hertzog at 571-272-1347. The examiner can normally be reached on Monday through Friday (from about 8:00 a.m. - 4:00 p.m.).

4. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley S. Silverman, can be reached at 571-272-1358. The central fax number for all communications is now 571-273-8300.

5. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

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published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. For any questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to be 'AEH', is written over the printed name 'AEH'.

January 9, 2006